

# Sandia National Laboratories



*Goal:*

Sandia's highest goal is to become the laboratory the United States turns to first for innovative, science-based systems engineering solutions to the most challenging problems that threaten peace and freedom for our nation and the globe.



Sandia grew out of America's World War II atomic bomb development effort. Today, keeping the U.S. nuclear stockpile safe, secure, and reliable remains a major part of Sandia's work. But Sandia's role has evolved to address the more complex national security threats facing our country. Sandia carries out research and development in:

**Nuclear Weapons** – Supporting U.S. deterrence policy by helping sustain, modernize, and protect the nuclear arsenal.

**Defense Systems & Assessments** – Supplying new capabilities to our defense and national security communities.

**Energy, Climate & Infrastructure Security** – Ensuring the stable supply of energy and resources and protection of infrastructure.

**International, Homeland, & Nuclear Security** – Focusing on the protection of nuclear assets and nuclear materials, and addressing nuclear emergency response and nonproliferation worldwide.

Sandia's Science, Technology, and Engineering foundation enables Sandia's mission through a capable research staff working at the forefront of innovation, collaborative research with universities and companies, and discretionary research projects with significant impact.

## People

Sandia's staff of 8,300 includes more than 4,000 technical employees and 1,600 Ph.D. engineers and scientists.



Our people work at the Lab's headquarters in Albuquerque, New Mexico; at a second principal lab in Livermore, California; and at several other sites in the U.S. and abroad, including Carlsbad, New Mexico; Las Vegas and Tonopah, Nevada; Amarillo, Texas; and Kauai, Hawaii.

## Budget

Sandia's fiscal year 2010 budget is \$2.4 billion.

## Capabilities

Meeting tomorrow's national security challenges will require readiness and rapid innovation. Sandia will help the nation solve significant problems with core capabilities in:

- High-performance computing and modeling and simulation
- Extreme-environment testing at unique facilities
- Intelligent microsystems
- Nanotechnologies

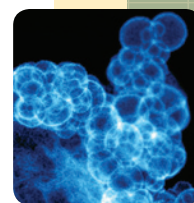
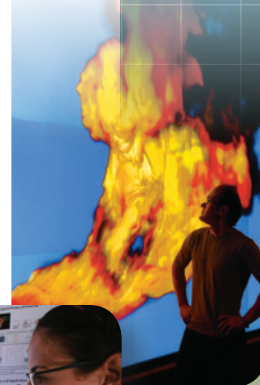
## Collaboration

Sandia's customers and collaborators include many federal, state, and local agencies, companies, and academic institutions. Partnerships are formed through cooperative agreements, licensing, technical assistance, centers of excellence, use of unique Sandia facilities, personnel exchanges, and other mutually beneficial arrangements.

## Achievements

Sandia has pioneered such products as cleanrooms for microelectronics manufacturing, triggers for automobile airbags, and high-resolution radars that see through clouds and darkness. Recent achievements include:

- An advanced, power-saving lighting system deployed at the 2010 Academy Awards®, featuring a quiet, a zero-emission electric power source running on a pure hydrogen fuel cell
- Partnership in the Joint BioEnergy Institute to study the efficient production of biofuels for cars and trucks
- Satellite sensors that help the nation monitor worldwide nuclear activity from space
- Improved nuclear weapons components that will help maintain U.S. strategic deterrence far into the 21st century
- A solar machine capable of converting air pollutants to liquid fuel



Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.. SAND 2010-3475P. MV.



Sandia  
National  
Laboratories